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Statistical Bulletin

METROPOLITAN LIFE INSURANCE COMPANY

Volume 29 MARCH 1948 *Number 3*

Divorce and Wartime Marriage

THE divorce rate in the United States, which has been climbing for many years, accelerated its rise in the immediate postwar period and reached an all-time high in 1946. Further examination of the figures shows that the recent upswing in the divorce rate was sharpest among those married less than five years—that is, essentially among those married during the war. A smaller, but still appreciable rise occurred also among families of longer standing. The course of the divorce rate according to duration of marriage may be traced for the period 1922 to 1946 in the chart on the following page.

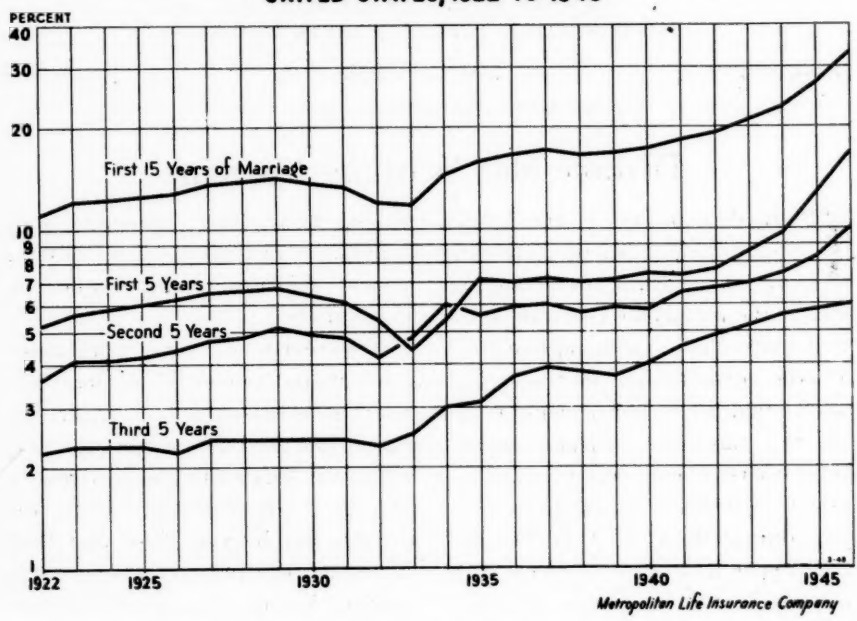
The probability of divorce among couples married only a relatively short time has more than doubled since Pearl Harbor. Whereas little more than 7 percent of marriages ended in divorce within five years in 1941, the proportion reached nearly 17 percent in 1946. Under current conditions a greater proportion of marriages are dissolved by divorce within five years than had been dissolved within the first 14 years of married life in any year of our history prior to 1941. The unstable character of many wartime marriages may be attributed to a variety of factors, among them hasty marriage, long separation during the war, and the general difficulty of readjustment to postwar life.

The frequency of divorce increased also among couples whose marriage had lasted beyond the early, critical years, but the relative rise was progressively smaller for each successive five years of marriage. While the divorce rate between 1941 and 1946 increased 130 percent among those married less than five years, the rate rose 55 percent among those married 5 to 9 years, and 33 percent among those married 10 to 14 years.

The trend of divorce for the first 15 years of marriage, as a whole, appears in the uppermost curve of the chart on page 2. According to the divorce rate in 1946, one of every three marriages in our country will be dissolved by divorce in the first 15 years of married life. This is double the ratio just prior to World War II, and three times the ratio of a quarter century ago.

In view of the foregoing facts, it is gratifying to find, in the table below, that the frequency of divorce was materially lower in 1947 than in 1946. In Nevada, for example, the number of divorces granted dropped 34 per-

PERCENT OF MARRIAGES ENDING IN DIVORCE WITHIN 15 YEARS UNITED STATES, 1922 TO 1946*



NOTE—The data through 1932 were computed from figures on divorce and annulment by duration of marriage, published by the Bureau of the Census. For later years, the divorce rates were estimated from data obtained by the Statistical Bureau of the Metropolitan Life Insurance Company from 13 States (Alabama, Florida, Iowa, Michigan, Mississippi, Montana, New Hampshire, Oregon, Rhode Island, Tennessee, Virginia, Wisconsin, and Wyoming) and the city of Cleveland; the data for this area are believed to be fairly representative of the situation in the country as a whole.

DIVORCES GRANTED IN SPECIFIED AREAS, 1941 TO 1947

AREA	NUMBER GRANTED							PERCENT CHANGE	
	1941	1942	1943	1944	1945	1946	1947	1946 Since 1941	1947 Since 1946
Florida	11,972	12,711	16,255	19,168	21,723	26,352	20,880	+120	—21
New York City	5,301	5,624	5,430	5,786	7,488	12,133	9,600	+129	—21
South Dakota	744	678	843	904	1,195	1,547	1,220	+108	—21
Texas	28,400	32,200	38,100	39,900	50,000	57,112	44,000	+101	—23
Santa Clara County, Calif.	741	795	1,075	1,185	1,570	1,688	1,254	+128	—26
Michigan	13,317	14,085	15,259	18,356	21,133	29,158	21,607	+119	—26
Minnesota	3,310	3,169	3,215	3,975	5,326	7,808	5,706	+136	—27
Nevada	6,000	8,000	11,000	12,600	15,019	20,635	13,706	+244	—34

NOTE—Figures for 1947 are provisional estimates.

Source—Inquiries by the Statistical Bureau of the Metropolitan Life Insurance Company, and reports from the National Office of Vital Statistics and from individual States.

cent. Declines of more than 20 percent were reported for Florida, South Dakota, Texas, Michigan, and Minnesota. The data on divorce available for 1947 are still meager, but when all the facts are in, it may be that the year will show a decline of as much as one quarter from the peak established in 1946.

If there is any comfort to be derived from the divorce record of recent years, it is that about three fifths of the marriages legally dissolved were childless. There are also definite indications that a considerable proportion of the divorced lost little time in remarrying. This may be inferred from the fact that although about 5,500,000 persons were divorced from 1940 through 1946, the number of divorced persons who had not remarried increased by only a little more than 500,000 during this period.

Record Longevity in Prospect for Babies of 1947

THE babies born in our country last year bear two distinguishing characteristics. First, they greatly exceed in number the children born in any previous year in our history; second, their prospective lifetime is at a record high.

The average length of life of the babies born in 1947, according to current mortality conditions, will be about 66½ years. This means that last year's crop of babies will live a total of 260,000,000 years. If they were subject to the mortality prevailing at the beginning of the century, their average length of life would be only 49¼ years, and they would have a total of 193,000,000 years of life. The Nation thus will benefit by 67,000,000 additional years of life through the improvement in health conditions. The chart on page 4 traces the number of survivors from age to age, on the basis of mortality in 1947 and according to conditions as they were in 1900-1902. The shaded area at the bottom of the chart represents the difference between the two survivorship curves and shows the number of lives saved, at each age, because of the reduction in mortality in the period under survey.

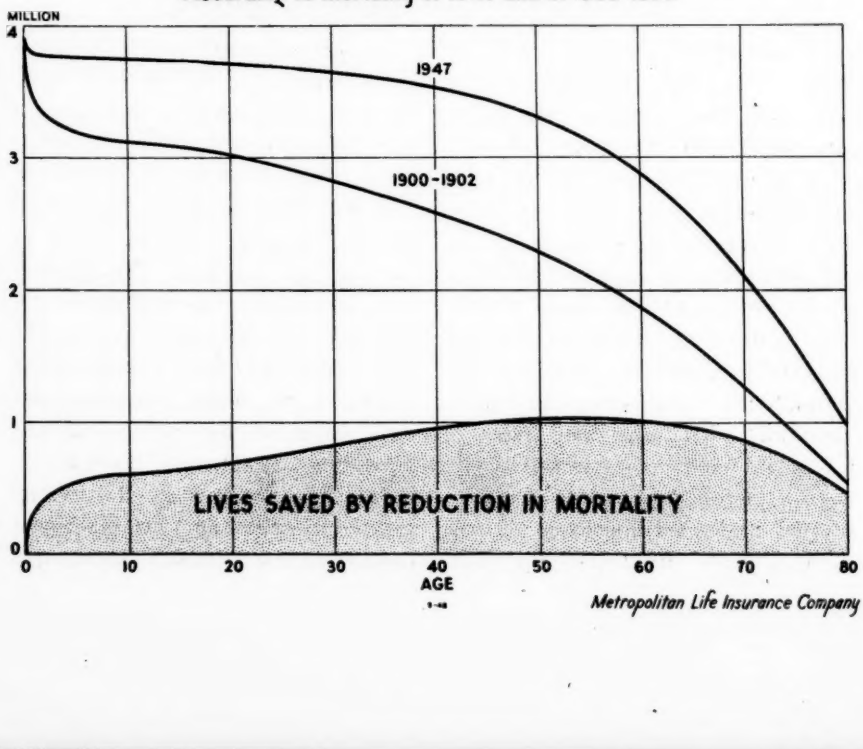
Practically 3,750,000 of the babies born last year will live to age 6, and enter our public schools; about 3,700,000 will survive to voting age; and more than 2,500,000 will reach 65 years, the usual retirement age. It is a striking fact that the number of these babies expected to survive to their 40th birthday will be larger than the total number of babies born in any year prior to 1947. The addition of these people to our population undoubtedly will be a great asset to the productivity and the strength of the Nation. If the babies born last year were subject to mortality conditions prevailing at the turn of the century, about 570,000 fewer children would survive to school age, 700,000 fewer young people would attain voting age,

and the number reaching age 65 would be decreased by almost 1,000,000. This remarkably large saving in life is due in good measure to advances in medical science and public health administration. Whatever the expenditures in these fields have been, the price has been small indeed as compared with the benefits derived.

It is altogether possible that the figures with regard to survivorship, large as they are, may actually be exceeded. There is every reason to believe that further progress will be made in reducing mortality in our country. The general downward trend in the death rate from the infectious diseases, and more especially from pneumonia and tuberculosis will continue. Some gains in life conservation may also be expected from the intensified efforts now being directed against the cardiovascular diseases, cancer, and other conditions of middle and later life. Our accident death toll can undoubtedly be brought down to lower levels. In short, there is still much room for improvement on many fronts.

The peak number of births in 1947 marked the culmination of an upsurge which had its origin during the war years. These war and postwar babies, through the sheer weight of numbers, are bound to make themselves felt as they enter school, graduate into the labor force, and later join the ranks of the retired. In fact, the impact of these children is already being felt by the public school system.

SURVIVORS OF BABIES BORN IN THE UNITED STATES IN 1947
According to Mortality of 1947 and of 1900-1902



Metropolitan Life Insurance Company

Conserving the Life and Health of Preschool Children

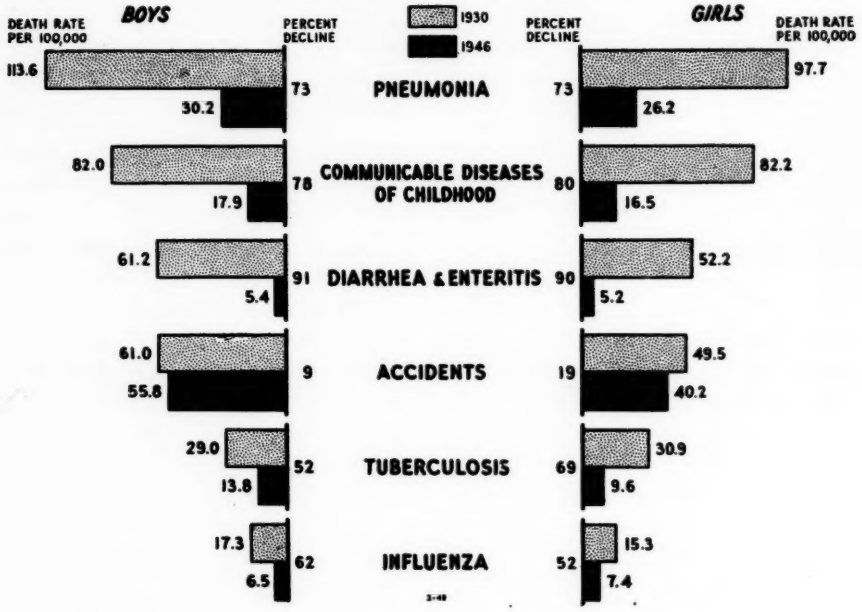
THE striking decline in the mortality among children of preschool age is an outstanding example of the recent progress in American public health. In the comparatively short period from 1930 to 1946, the death rate dropped more than 60 percent among boys and girls 1 to 4 years of age insured in the Industrial Department of the Company (Weekly Premium Branch). For some of the individual causes of death, the reduction has been unbelievably large. The death rate from diarrhea and enteritis, for example, declined fully 90 percent between 1930 and 1946; the mortality from the principal communicable diseases of childhood dropped virtually 80 percent, and the rate from pneumonia nearly 75 percent. In fact, almost all the major causes of death at ages 1 to 4 recorded large reductions. Accidents are the exception, the death rate from this cause declining 9 percent among the boys and 19 percent among the girls in the period under study. These facts are presented in graphic form in the chart on page 6.

It is a remarkable fact that the death rate from *all causes combined* among these preschool children is currently about equal to the death rate from pneumonia and the communicable diseases of childhood alone in 1930. Many factors have contributed to this extraordinary reduction in mortality. Preventive measures such as immunization procedures and purer water, milk and other foods have played an important role in this achievement. Other vital factors have been higher standards of medical care, greater availability of such care, and newer methods of treatment, including chemotherapy. Operating in the same direction have been rising standards of living and the spread of health education.

The rapidly changing mortality picture at the preschool ages has brought about major shifts in the relative importance of the various causes of death. As the table on page 6 shows, accidents now outrank every other cause, accounting for one out of every four deaths among boys and for one out of every five deaths among girls at ages 1 to 4. Pneumonia, which in 1930 was the leading cause of death by a very considerable margin, is now a poor second to accidents. Diarrhea and enteritis no longer rank among the leading causes of death at the preschool ages. A surprising development is the entry of cancer (including leukemia) into the picture as a leading cause of death, now ranking fifth among boys and fourth among girls at the preschool ages. This cause currently is responsible for one death in every 19 among children 1 to 4 years in this insurance experience. These changes in the relative importance of the various causes have brought new concepts regarding

DECLINE IN MORTALITY FROM LEADING CAUSES AT AGES 1 TO 4

Metropolitan Life Insurance Company, Weekly Premium-Paying Business, 1930 to 1946



NOTE—Causes of death listed in order of importance in 1930.

DEATHS FROM LEADING CAUSES AS PERCENT OF ALL DEATHS, AGES 1 TO 4 YEARS. BY SEX. METROPOLITAN LIFE INSURANCE COMPANY, WEEKLY PREMIUM-PAYING INDUSTRIAL BUSINESS. 1945-1946

BOYS		GIRLS	
Cause of Death	Percent of All Deaths	Cause of Death	Percent of All Deaths
ALL CAUSES	100.0	ALL CAUSES	100.0
Accidents	26.8	Accidents	20.8
Pneumonia	13.2	Pneumonia	15.8
Communicable diseases of childhood	8.0	Communicable diseases of childhood	8.5
Tuberculosis	6.1	Cancer and leukemia	6.0
Cancer and leukemia	4.7	Tuberculosis	5.9
Congenital malformations	3.9	Influenza	4.7

the problems and objectives of child health.

The brilliant results achieved thus far in conserving child life must not obscure the fact that there are still many thousands of preschool children who die from preventable causes in the United States. Large numbers of these children could be saved by extending the immunization program, by the wider use of improved therapeutic methods, and by the provision of prompt medical care. The campaign of safety education must be strengthened in order to cut the accident death toll among young children. As has already been noted, the reduction in mortality from this cause has been relatively small. The safety education program on behalf of these youngsters must be directed largely to adults. The majority of accidents among preschool children occur in the home. In this insurance experience, burns and conflagrations account for nearly one fourth of all fatal accidents among preschool-age boys and for nearly two fifths among the girls. Poisoning and falls also rank among the leading causes of fatal accidents at these ages. Outside the home, motor vehicle accidents are the major cause of fatal injury, being responsible for a little more than one fourth of all fatal mishaps among these children.

The program to promote child health is giving increasing attention to the discovery and correction of physical defects, emotional disorders, and other handicaps which are not a direct threat to life, but which may interfere with a child's health and education in later years. It is in the preschool ages that the foundation for lifelong good health habits can best be laid. The eating habits and the diets of many young children are far from satisfactory, and a large number of youngsters show evidence of various nutritional deficiencies. The frequency of dental troubles among preschool children is much higher than is generally realized. Proper care of the first teeth, often neglected, would prevent much of the deterioration found later in the permanent teeth. Studies also indicate that a distressingly large number of children suffer from seriously impaired vision or hearing. The early detection and care of these impairments would be a boon to the children, and save many of them from difficulties in later life.

The personality maladjustments of adult life, it is generally agreed, usually have their origin in early childhood. Many parents need help in achieving an understanding of the emotional life and problems of the child. The mental hygiene aspects of the home environment have not yet received the attention they merit. More abundant and well-located recreation and nursery school facilities in our crowded cities would undoubtedly serve to enhance sound mental health as well as physical well-being in our preschool children.

Despite the relative abundance of our health facilities, they fall short in many areas; moreover, the facilities we have are not utilized as efficiently

as they could be. It is encouraging indeed that pediatricians have taken the lead in conducting an extensive survey of child health services under the auspices of the American Academy of Pediatrics. Such studies will clearly indicate the gaps in these services and how they can be filled. Parents need additional instruction on how to protect the health of young children, and how to detect deviations from the normal. All these efforts on behalf of preschool children will pay handsome dividends.

Population Density in Our Country Increasing

THE density of population in the United States has increased nearly 90 percent since the beginning of the century. In 1900, there were 25.6 persons per square mile of land area in our country; by the time of the 1940 census, there were 44.2 persons per square mile, and by the middle of last year there were 48.2. The details appear in the table on page 9.

Every State in the Union showed an increasing density of population between 1900 and 1947, but the relative rise varied markedly from one State to another. The increase ranged from only 4 percent in Vermont to more than 200 percent in Florida and seven Western States — California, Arizona, Washington, Oregon, Nevada, Wyoming, and Idaho. Nevertheless, the rank of the individual States with respect to population density has changed but little. In fact, the 10 most densely populated States at the turn of the century have retained their respective positions without any change whatever. There are several exceptions, however, to the general rule. California, for example, climbed from 36th place in 1900 to 18th place in 1947. Florida moved up from 35th place to 27th. Missouri and Iowa, on the other hand, have each been overtaken by seven States, dropping to 23d and to 26th place, respectively.

Focusing attention on the changes since 1940, we find that the density of population actually decreased in 11 States, most of which are located in the South Central States and the Great Plains area. Never before in our history has so large an area shown a comparable loss of population. The situation reflects, in large measure, the accelerated movement of population in recent years from farm to nonfarm and to urban areas. Our people tend more and more to concentrate in industrial centers. Even in the Southern States, which have experienced heavy out-migration, the urban population has grown rapidly since 1940. In fact, between 1940 and 1947 the urban population of the United States increased 12.7 percent, the rural nonfarm population increased 14.3 percent (largely from growth of suburban areas), whereas the farm population fell 9.6 percent.

The most densely populated area of the country lies along the Atlantic

DENSITY OF POPULATION* IN THE UNITED STATES, 1900-1947

STATE	RANK IN		DENSITY OF POPULATION*						PERCENT INCREASE 1947 SINCE 1900
	1947	1900	1900	1910	1920	1930	1940	1947	
United States	—	—	25.6	30.9	35.5	41.2	44.2	48.2	88
Rhode Island	1	1	401.6	508.5	566.4	649.8	674.2	719.3	79
Massachusetts	2	2	349.0	418.8	479.2	537.4	545.9	597.6	71
New Jersey	3	3	250.7	337.7	420.0	537.3	553.1	589.6	135
Connecticut	4	4	188.5	231.3	286.4	328.0	348.9	412.3	119
New York	5	5	152.5	191.2	217.9	262.6	281.2	294.0	93
Pennsylvania	6	6	140.6	171.0	194.5	213.8	219.8	228.2	62
Maryland	7	7	119.5	130.3	145.8	165.0	184.2	224.0	87
Ohio	8	8	102.1	117.0	141.4	161.6	168.0	189.0	85
Delaware	9	9	94.0	103.0	113.5	120.5	134.7	148.1	58
Illinois	10	10	86.1	100.6	115.7	136.4	141.2	146.9	71
Michigan	11	18	42.1	48.9	63.8	84.9	92.2	109.6	160
Indiana	12	11	70.1	74.9	81.3	89.4	94.7	106.6	52
West Virginia	13	20	39.9	50.8	60.9	71.8	79.0	76.8	92
Virginia	14	14	46.1	51.2	57.4	60.7	67.1	75.7	64
No. Carolina	15	21	38.9	45.3	52.5	64.5	72.7	75.7	95
Tennessee	16	13	48.5	52.4	56.1	62.4	69.5	73.4	51
Kentucky	17	12	53.4	57.0	60.1	65.2	70.9	69.2	30
California	18	36	9.5	15.3	22.0	36.2	44.1	63.0	563
So. Carolina	19	17	44.0	49.7	55.2	56.8	62.1	62.7	43
New Hamp.	20	15	45.6	47.7	49.1	51.6	54.5	60.6	33
Wisconsin	21	24	37.4	42.2	47.6	53.7	57.3	60.0	60
Louisiana	22	27	30.4	36.5	39.6	46.5	52.3	56.4	86
Missouri	23	16	45.2	47.9	49.5	52.4	54.6	55.6	23
Alabama	24	25	35.7	41.7	45.8	51.8	55.5	55.3	55
Georgia	25	22	37.7	44.4	49.3	49.7	53.4	55.2	46
Iowa	26	19	40.2	40.0	43.2	44.1	45.3	46.5	16
Florida	27	35	9.6	13.7	17.7	27.1	35.0	44.1	359
Mississippi	28	26	33.5	38.8	38.6	42.4	46.1	44.1	32
Vermont	29	23	37.7	39.0	38.6	38.8	38.7	39.2	4
Minnesota	30	30	21.7	25.7	29.5	32.0	34.9	36.2	67
Arkansas	31	28	25.0	30.0	33.4	35.2	37.0	36.1	44
Oklahoma	32	34	11.4	23.9	29.2	34.6	33.7	33.4	193
Washington	33	37	7.8	17.1	20.3	23.3	25.9	33.3	327
Maine	34	29	23.2	24.8	25.7	25.7	27.3	29.3	26
Texas	35	33	11.6	14.8	17.8	22.1	24.3	27.0	133
Kansas	36	31	18.0	20.7	21.6	22.9	21.9	23.3	29
Nebraska	37	32	13.9	15.5	16.9	18.0	17.2	17.0	22
Oregon	38	41	4.3	7.0	8.2	9.9	11.3	15.7	265
Colorado	39	38	5.2	7.7	9.1	10.0	10.8	11.1	113
No. Dakota	40	40	4.5	8.2	9.2	9.7	9.2	7.9	76
Utah	41	42	3.4	4.5	5.5	6.2	6.7	7.7	126
So. Dakota	42	39	5.2	7.6	8.3	9.1	8.4	7.4	42
Idaho	43	43	1.9	3.9	5.2	5.4	6.3	5.9	211
Arizona	44	46	1.1	1.8	2.9	3.8	4.4	5.8	427
New Mexico	45	45	1.6	2.7	2.9	3.5	4.4	4.5	181
Montana	46	44	1.7	2.6	3.8	3.7	3.8	3.4	100
Wyoming	47	47	.9	1.5	2.0	2.3	2.6	2.8	211
Nevada	48	48	.4	.7	.7	.8	1.0	1.3	225

*Number of inhabitants per square mile of land area.

NOTE—Density of population for 1947 computed by the Statistical Bureau, Metropolitan Life Insurance Company, from population estimates published by the Bureau of the Census.

Coast, from the southern border of Maine to the northern border of Virginia. This region includes such metropolitan centers as Boston, New York, Philadelphia, Baltimore, and Washington. These cities and their suburbs have a population of 21,000,000, which constitutes 15 percent of the total for the country as a whole. A second area of population concentration, though of lesser density than the eastern seaboard, lies around the Great Lakes, with clustering of population in and about the cities of Chicago and Detroit.

Rhode Island, with about 720 persons per square mile, is the most densely populated State in the Union. Following in order are Massachusetts, with 598; New Jersey, with 590; and Connecticut, with 412. The density of population in these States approaches the figures for England, Belgium, the Netherlands, and the other heavily populated areas of Europe. On the other hand, we have our wide-open spaces, particularly in the Mountain States and in the adjoining Great Plains. In Montana, for example, there are 3.4 persons per square mile, in Wyoming 2.8, and in Nevada only 1.3.

The United States as a whole is one of the less densely settled countries of the world, and will continue to be so for many years to come. According to forecasts based on assumptions of medium fertility and medium mortality, our population will be about 166,000,000 in 1975; this would mean a density of 56 per square mile. Even on the most favorable assumptions, our population in 1975 will be about 185,000,000, which is still only 62 persons per square mile.

CRUDE DEATH RATES* PER 100,000 POLICYHOLDERS FROM SELECTED CAUSES
INDUSTRIAL PREMIUM-PAYING BUSINESS—*Weekly and Monthly Combined.*
METROPOLITAN LIFE INSURANCE COMPANY

FEBRUARY 1948

CAUSE OF DEATH	ANNUAL RATE PER 100,000 POLICYHOLDERS*				
	FEBRUARY 1948	FEBRUARY 1947	YEAR TO DATE: END OF FEBRUARY		
			1948	1947	1946
ALL CAUSES—TOTAL	677.0	659.0	707.8	690.4	823.5
—Excluding war deaths	*676.9*	*658.3*	*707.7*	*689.5*	*793.6*
Typhoid fever	—	0.1	0.1	0.2	0.1
Measles	.6	.2	.4	.2	.3
Scarlet fever	—	—	‡	‡	.2
Whooping cough	.7	.6	.5	.6	1.0
Diphtheria	.3	.6	.4	.8	1.1
Influenza	3.7	2.7	3.4	2.9	12.7
Pneumonia (all forms)	28.3	26.7	31.0	29.3	42.1
Tuberculosis (all forms)	26.0	29.3	27.5	29.5	36.1
Tuberculosis of respiratory system	23.5	26.9	24.8	26.8	33.3
Syphilis	6.7	6.9	6.8	7.1	7.5
Acute poliomyelitis	—	.2	.2	.5	.4
Cancer (all forms)	103.2	101.8	107.4	102.5	104.2
Diabetes mellitus	22.5	19.5	24.0	22.1	30.6
Principal chronic cardiovascular-renal diseases	334.0	309.3	344.5	322.2	362.9
Cerebral hemorrhage	63.6	62.5	65.4	63.0	68.7
Diseases of the coronary arteries and angina pectoris	78.4	67.6	83.8	72.0	70.9
Other chronic heart diseases†	158.6	143.9	159.5	150.9	178.6
Chronic nephritis	33.4	35.3	35.8	36.3	44.7
Diarrhea and enteritis	3.9	3.6	3.4	3.2	2.4
Appendicitis	2.1	2.9	1.9	2.7	3.7
Puerperal state—total	2.1	2.4	2.2	2.9	3.1
Suicides	5.9	6.7	5.8	6.0	6.7
Homicides	2.6	2.5	2.7	2.6	3.0
Accidents—total	35.6	36.3	38.1	41.4	51.6
Home accidents	10.8	8.5	9.5	9.8	11.3
Occupational accidents	3.7	3.6	3.7	3.8	4.1
Motor vehicle accidents	9.1	13.1	12.2	14.8	15.1
War deaths (enemy action)	.1	.7	.1	.9	29.9
All other causes of death	98.7	105.9	107.4	112.7	123.9

NOTE—The death rates in this table differ from the rates previously published on the basis of the Weekly Premium-Paying Business alone.

*The rates for 1948 and 1947 are subject to slight correction, since they are based on provisional estimates of lives exposed to risk.

†International List (1940) titles 92, 93 (c), (d), (e), and 95. ‡Less than 0.05 per 100,000.

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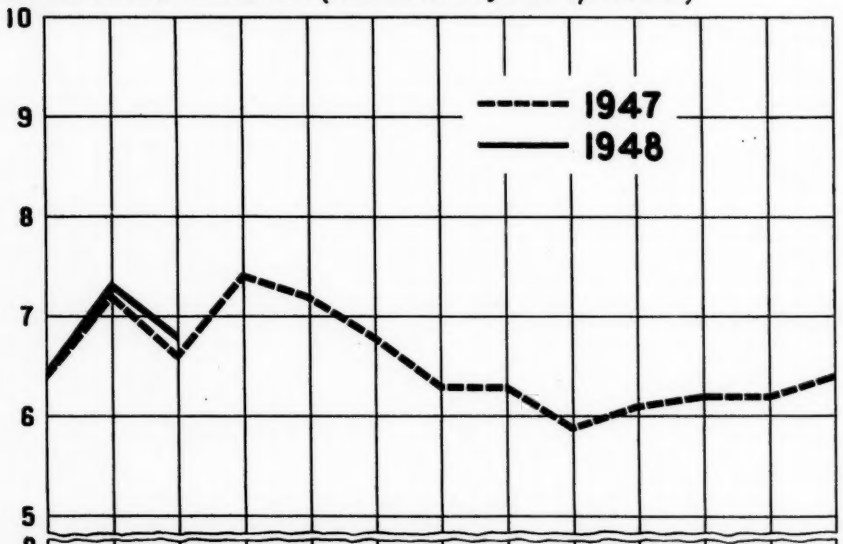
MORTALITY FROM ALL CAUSES

**METROPOLITAN LIFE INSURANCE COMPANY·INDUSTRIAL PREMIUM-PAYING BUSINESS
WEEKLY AND MONTHLY COMBINED**

DEATH RATES PER 1,000·ANNUAL BASIS (*1947 and 1948 figures are provisional*)



	(DEC)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1947		7.2	6.6	7.4	7.2	6.8	6.3	6.3	5.9	6.1	6.2	6.2	6.4
1948		7.3	6.8										

NOTE—The death rates in this chart differ from the rates previously published on the basis of the Weekly Premium-Paying Business alone.

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